

**Amendments to the Claims:****Listing of Claims:**

1. – 28. (Canceled).

29. (Currently Amended) A method of inducing activation of dendritic cells comprising administering a composition to a mammal, wherein the composition comprises at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer and a polycationic polymer, wherein a polynucleotide complex is formed between the polynucleotide, block copolymer and polycationic polymer, wherein the block copolymer comprises at least PLURONIC F127 and L61, and wherein more than one ~~plasmid or~~ gene is expressed, and wherein at least one expresses an antigen and at least one expresses a molecules that activates dendritic cells.

30. (Cancelled)

31. (Currently Amended) The method of claim 30 wherein ~~the adjuvant is selected from the group consisting essentially of an interleukin, interleukin 12, Flt3 ligand, GM-CSF, and CD40 ligand;~~ and the block copolymer is present in amounts insufficient for gel formation.

32. (Currently Amended) A method of inducing activation of dendritic cells comprising administering a composition to a mammal, wherein the composition comprises at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer and a polycationic polymer, wherein a polynucleotide complex is formed between the polynucleotide, block copolymer and polycationic polymer, wherein the at least one polyoxyethylene-polyoxypropylene block copolymer comprises PLURONIC F127 and L61–, wherein the composition forms a molecular solution or colloidal dispersion, wherein the at least one polynucleotide comprises a CMV promoter or a NF- $\kappa$ B-sensitive element, and wherein more than one ~~plasmid or~~ gene is expressed, and wherein at least one expresses an antigen and at least one expresses a molecule that activates dendritic cells.

33. (Cancelled)

34. (Currently Amended) A method of increasing an immune response comprising administering a composition to a mammal, wherein the composition comprises at least one polynucleotide and at least one polyoxyethylene-polyoxypropylene block copolymer ~~to a~~

~~mammal~~ and a polycationic polymer, wherein a polynucleotide complex is formed between the polynucleotide, block copolymer and polycationic polymer, wherein the at least one polyoxyethylene-polyoxypropylene block copolymer comprises PLURONIC F127 and L61, wherein more than one ~~plasmid or~~ gene is expressed, and wherein at least one expresses an antigen and an adjuvant is expressed from the at least one polynucleotide thereby inducing an immune response.

35. (Cancelled)

36. (Original) The method of claim 34 wherein the composition is administered orally, topically, rectally, vaginally, parenterally, intramuscularly, intradermally, subcutaneously, intraperitoneally, or intravenously.

37. (Currently Amended) The method of claim 36 wherein the composition is administered intramuscularly.

38. (Previously presented) The method of claim 37 wherein the composition comprises at least PLURONIC F127 and L61.

39. (Original) The method of claim 37 wherein said composition is administered to at least one of smooth, skeletal, and cardiac muscles.

40. (Previously presented) The method of claim 36 wherein the composition is administered intradermally.

41. - 69. (Canceled).

70. (Previously presented) The method of inducing the activation of dendritic cells of claim 29, wherein the block copolymer is present in amounts insufficient for gel formation.

71. (Previously presented) The method of claim 70 wherein the composition comprises at least PLURONIC F127 and L61.

72. (Previously presented) The method of inducing activation of dendritic cells of claim 29 wherein the composition forms a molecular solution or colloidal dispersion.

73. (Original) The method of claim 72 wherein the block copolymers are PLURONIC F127 and L61.

74. (Canceled).

75. (Original) The method of claim 72 wherein the composition is administered orally, topically, rectally, vaginally, parenterally, intramuscularly, intradermally, subcutaneously, intraperitoneally, or intravenously.

76. (Original) The method of claim 72 wherein said composition is administered to at least one of smooth, skeletal, and cardiac muscles.

77. (Previously presented) The method of claim 75 wherein the composition is administered intradermally.